

DATA SHEET

TX20/13/6.4
Alloy powder toroids

New data

2008 Sep 01

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RING CORES (TOROIDS)

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	2.25	mm ⁻¹
V_e	effective volume	1150	mm ³
l_e	effective length	50.9	mm
A_e	effective area	22.6	mm ²
m	mass of core (for μ_i 125)	MPP	9.40 g
		Sendust	7.10 g
		High-Flux	8.90 g

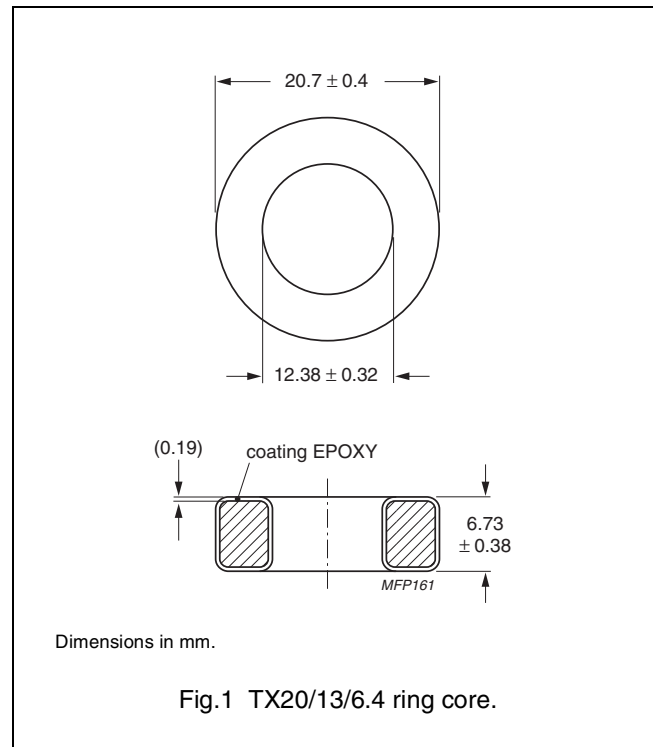
Coating

The cores are coated with epoxy. The colour is black (Sendust), grey (MPP) or khaki (High-Flux). Maximum operating temperature is 200 °C.

Isolation voltage

AC isolation voltage : 1000 V.

Contacts are applied on the edge of the ring core, which is also the critical point for the winding operation.



Ring core data - Note 1. Mechanical dimensions : OD ≤ 21.1, ID ≥ 12.07, H ≤ 7.11

GRADE	A_L (nH)	μ_i	B (mT) at H = 100 kA/m; f = 10 kHz; T = 25 °C	CORE LOSS (W) at f = 100 kHz; B = 100 mT; T = 25 °C	TYPE NUMBER
MPP	7.8 ± 8 %	14	≥ 640	1.73	TX20/6.4-M2-A7.8
	14 ± 8 %	26	≥ 700	1.38	TX20/6.4-M2-A14
	32 ± 8 %	60	≥ 760	0.863	TX20/6.4-M2-A32
	68 ± 8 %	125	≥ 800	0.863	TX20/6.4-M2-A68
	81 ± 8 %	147	≥ 800	0.920	TX20/6.4-M2-A81
	87 ± 8 %	160	≥ 800	0.920	TX20/6.4-M2-A87
	109 ± 8 %	200	≥ 800	1.73	TX20/6.4-M2-A109
Sendust ⁽¹⁾	163 ± 8 %	300	≥ 800	1.73	TX20/6.4-M2-A163
	32 ± 8 %	60	≥ 1030	0.983	TX20/6.4-S7-A32-MC
	41 ± 8 %	75	≥ 1040	0.983	TX20/6.4-S7-A41-MC
	49 ± 8 %	90	≥ 1050	0.983	TX20/6.4-S7-A49-MC
High-Flux	68 ± 8 %	125	≥ 1060	0.983	TX20/6.4-S7-A68-MC
	7.8 ± 8 %	14	≥ 890	2.88	TX20/6.4-H2-A7.8
	14 ± 8 %	26	≥ 980	2.30	TX20/6.4-H2-A14
	32 ± 8 %	60	≥ 1280	2.07	TX20/6.4-H2-A32
	68 ± 8 %	125	≥ 1370	2.30	TX20/6.4-H2-A68
	81 ± 8 %	147	≥ 1385	2.53	TX20/6.4-H2-A81
	87 ± 8 %	160	≥ 1400	4.03	TX20/6.4-H2-A87

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DATA SHEET STATUS DEFINITIONS

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Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
Prototype		These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
Design-in		These products are recommended for new designs.
Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.